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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,468	08/16/2001	Juuro Aoyagi	4296-105.1 US	2999

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MATHEWS, COLLINS, SHEPHERD & GOULD, P.A.
SUITE 306
100 THANET CIRCLE
PRINCETON, NJ 08540

EXAMINER	
TRAN, SUSAN T	

ART UNIT	PAPER NUMBER
1615	17

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/931,468	AOYAGI ET AL.	
	Examiner	Art Unit	
	Susan Tran	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Receipt is acknowledged of applicant's Extension of Time and Amendment filed 01/13/03.

Claim Objections

Claim 12 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the *alternative only*. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 8, 9, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara JP 61-216044, in view of Ochi JP 61-48614.

Hara teaches formed hydrophobic konjak gel useful as absorbent film, waterproof paper, or material for seasoning (pages 2-4, and tables on page 14). Hara is silent as to the teaching of the konjak gel coating an adsorbent material. However, Hara teaches that the konjak gel can be made in sheet, and used as absorbent film.

Ochi teaches particles of adsorbent agent to adsorb fatty acid and cholesterol formed by digestion in digestive organ, where the adsorbent agent is coated with film forming material. It would have been obvious for one of ordinary skill in the art to use

the konjak gel film as a coating material for Ochi's adsorbent agent, because the references teach the advantageous results over the use of gel-forming material useful in pharmaceutical and food arts. The expected result would be an adsorbent particle containing gel coating film useful as food grade and nonfood grade substances.

Claims 5-7, and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara and Ochi, in view of Unger et al. WO 93/12877 and Muhfeld et al. US 5,972,427.

Hara and Ochi are relied upon for the reason stated above. The references are silent as to the teachings of adsorbent agent, and polymer film forming.

Unger teaches adsorbent material coating with gel-forming polymer useful to remove substances from fluid stream (pages 3-4, 11-13, 18). Unger does not teach activated carbon as an adsorbent agent.

Muhlfeld teaches adsorbent particles comprising activated carbon, silica gel, or charcoal as sorption mean (column 5). Hence, it would have been obvious for one of ordinary skill in the art to use activated carbon or charcoal as an adsorbent agent in view of the teaching of Muhlfeld, and polymer film-forming of Unger, because the references teach the advantageous results over the use of gel-forming material as an adsorbent mean to remove unwanted substances useful in pharmaceutical and food arts. The expected result would be an adsorbent particle containing gel coating film useful as food grade and nonfood grade substances.

Response to Arguments

Applicant's arguments filed 01/13/03 have been fully considered but they are not persuasive.

Applicant argues that Hara does not teach or suggest an adsorbent formed by coating an adsorption basis with a gel substance and subsequently subjecting the coated bases to a freezing treatment. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Hara is obvious in view of the teachings of Ochi.

Applicant argues that Ochi does not teach concretely either from what material the protective film is made, nor how micropores are made to form the in "adsorption" in the protection film. In the instant case, Ochi is obvious in view of the teachings of Hara. Hara teaches konjak gel can be made into sheet useful as absorbent film. Ochi teaches an adsorbent agent is being coated with film forming material. It is noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Accordingly, it would have been obvious for one of ordinary skill in this art to modify the

konjak absorbent film forming to coat the adsorbent agent in view of the teachings of Ochi with the expectation of at least similar results. In response to applicant's argument that Ochi does not teach concretely either from what material the protective film is made, it is noted that the feature upon which applicant relies (i.e., what material the protective film is made) is not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In response to applicant's argument that Ochi does not teach how micropores are made, it is noted that the rejected claims are product claims, and therefore the patentability of the claims does not depend on its method of production, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Applicant argues that neither Unger nor Muhlfeld teach an adsorbent formed by coating an adsorption basis with a gel substance and subsequently subjecting the coated basis to a freezing treatment. In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Unger is relied upon solely for the teaching of an adsorbent material coated with gel-forming polymer useful to remove substances from fluid stream; Muhlfeld is relied upon solely for the teaching of the adsorbent materials, including activated carbon, silica gel,

or charcoal. Thus, it is the position of the examiner that it would have been obvious for one of ordinary skill in the art to combine the teachings of Hara, Ochi, Unger, and Muhlfeld to obtain at least similar result.

Applicant argument regarding the minute particles of powdered active carbon permits highly efficient removal by adsorption of a harmful substance because active carbon is put in a highly dispersed state and the absorbent in its entirely enjoys an increase in the surface area available for adsorption and a consequent increase in the ability of effect adsorption as compared with the adsorbent produced by solely using active carbon; as well as the argument regarding to the adsorption basis coated with the gel substance, which can be directly ingested into the digestive system are not persuasive, because the features upon which applicant argues are not recited in the rejected claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Tran whose telephone number is (703) 306-5816. The examiner can normally be reached on Monday through Thursday from 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3592.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600